



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/849,573	05/18/2004	Dimitri Chernyak	018158-024000US	6344

20350 7590 10/31/2008  
TOWNSEND AND TOWNSEND AND CREW, LLP  
TWO EMBARCADERO CENTER  
EIGHTH FLOOR  
SAN FRANCISCO, CA 94111-3834

EXAMINER
----------

SHAY, DAVID M

ART UNIT	PAPER NUMBER
----------	--------------

3769

MAIL DATE	DELIVERY MODE
-----------	---------------

10/31/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/849,573	<b>Applicant(s)</b> CHERNYAK, DIMITRI	
	<b>Examiner</b> david shay	<b>Art Unit</b> 3735	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

Art Unit: 3735

Applicant argues that the recitation in claim 32 is definite, because, taken in conjunction with “the rest of the disclosure” would be understood by one of ordinary skill in the art as a diameter suitable for providing enhanced treatment of presbyopia. The examiner must respectfully disagree. Firstly, as the disclosure is directed to presbyopia correction, clearly one of ordinary skill in the art would understand that this is the aim of the claimed invention. However, applicant’s duty in drafting the claims is to “ensure that the public is informed of the boundaries of what constitutes infringement of the patent” (see MPEP 2173). In the instant case the requirement that “the central zone of the first ablative shape has a diameter scaled to a diameter of the pupil” does not clearly set forth the metes and bounds of the claim. This is due to the fact that, in the originally filed disclosure, there is no guidance of any kind given as to the pupillary diameter, which can vary widely depending upon the individual and the ambient illumination level, to be used, and additionally because there is also no guidance given whatsoever with regard to the scaling factor which is to be used. Given the vast breadth of such a recitation, the metes and bounds of the claim are unclear, especially with respect to the claim from which it depends. Thus applicant’s arguments are not convincing.

With regard to the art rejections, applicant asserts that the rejection under 35 U.S.C. 102(b) is improper, as the disclosure of Largent “discloses varying the ablation of a single eye...” and further that “there is no teaching or suggestion of providing the complementary ablation shapes for the first or second eyes or of coordinating the ablation of a first and second eye to improve near vision through different zones of each eye. The examiner must respectfully disagree. Firstly, with regard to the disclosure of Largent being directed to the ablation of a single eye, the examiner must respectfully note that the disclosure of Largent is directed to one

Art Unit: 3735

of ordinary skill in the art, Largent states that the field of the invention “relates to vision correction, particularly to vision correction by shaping of the cornea” (see column 1, lines 4-5). One of ordinary skill in the art in the field of vision correction is an ocular surgeon, this specialty requiring not only 12 years of primary and secondary school, but 4 years of college, 4 more years of medical school, and additional years as an intern before qualifying as, an ocular surgeon. Such individuals are, of necessity, familiar with various vision imperfections, as well as the means for correcting them. Further, such individuals are also familiar with the fact that the vast majority of individuals needing vision correction require such correction in both eyes. Similarly, one of ordinary skill in the art will also be aware that the various individuals needing correction will require a wide variety of corrections, including, but not limited to, correction for hyperopia, or far sightedness. Given this, it is the examiner’s view that the disclosure of Largent encompasses the treatment of both eyes, regardless of the disclosure referring thereto *ipsis verbis*. Further evidence of this is found in column 1, lines 8-9: “vision correction is often obtained through the use of ophthalmic lenses, such as eye glasses”; the American Heritage Dictionary defines “glasses” as 4.b. A pair of lenses mounted in a frame, used to correct faulty vision”. Thus clearly there is a teaching to correct vision in both eyes.

With regard to the provision of “complementary corrections”, the presence of a such a teaching in Largent is not an issue, when the reference is applied to claims which are much more broadly cast. Claim 1 merely requires that a “central zone of a corneal surface of a first eye” be recurved to “improve the patient’s ability to view near objects”; while a “peripheral zone of a corneal surface of a second eye” be recurved to “improve the patient’s ability to view near objects”. Largent can be interpreted to read on the limitations of this claim in two ways: (i)

Art Unit: 3735

performing the operation on a patient that is initially far sighted (note there is no admonition in Largent that such individuals be prevented from having the treatment taught therein) according to the teachings of Largent would recurve the region C in Figure 2 of Largent, which will be considered the central region for this example, to provide intermediate vision, this recurvature would clearly “improve the patient’s ability to view near objects”; treating the second eye of such a patient according to the teachings of Largent would produce, in addition to the previously discussed central region, a peripheral region, which would include, for example the region N of Figure 2 of Largent, which “annular region N provides near vision correction powers” (see Largent column 3, lines 60-61), a peripheral region including such a correction would undeniably “improve the patient’s ability to view near objects”, thus clearly the limitations of the claim are met; alternatively (ii) treating both of the patients eyes according to the teachings of Largent would produce one eye which has a “central zone” which is regarded as the zone encompassing regions C, F1, P1, and N1, which with the inclusion of the near region N1, would “improve the patient’s ability to view near objects” and the other eye would have a peripheral region including, for example, the regions P2, F2, P3, N2, which with the inclusion of the near region N2, would also “improve the patient’s ability to view near objects”. Thus applicants arguments are not convincing.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 3735

Claims 32 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 32 is further indefinite, as it is unclear how the diameter of the central ablation zone can be scaled to that of the pupil, which has a variable diameter depending on lighting conditions.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5, 9, 11, 14-17, 19, 23, 24, and 26 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Largent.

Largent teaches providing concentric ablation areas of both far and near vision corrections in each eye, thus providing the claimed peripheral curvatures, and providing a mid range aspherical ablation which will increase the distance vision in a near sighted eye and the near vision in a far sighted eye; the diameter of the central zone will have some numerical relationship to one of the many diameters the pupil can assume and can therefore be considered “scaled” thereto by the factor of the numerical relationship; and the near vision in a far sighted eye, and as can be seen from the power graph in Figure 3, also provides the claimed transition zones.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3735

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 6-8, 10, 12, 13, 18, 20-22, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Largent. Largent provides the teachings set forth above. It would have been obvious to the artisan of ordinary skill to provide an unablated zone in the central region and the specific diopter corrections recited, since these are well within the scope of one having ordinary skill in the art, are not critical, and provide no unexpected result, thus producing a device and method such as claimed.

Claims 27-30, 32, 36, 37, 39, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Largent in combination with Munnerlyn et al. Largent provides the teachings set forth above. Munnerlyn et al teach employing a tangible medium to instruct a processor to control an optical system to cause a laser to ablate an eye according to a treatment table. It would have been obvious to the artisan of ordinary skill to employ the medium and treatment table of Munnerlyn et al in the device of Largent, because Largent doesn't provide any details regarding the laser scanning system to recurve the eye, thus one of ordinary skill in the art would of necessity look to the laser cornea recurving art to determine the form such a system would take, thus producing a system such as claimed.

Claims 31, 33-35, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Largent in combination with Munnerlyn et al. Largent and Munnerlyn et al provide the teachings set forth above. It would have been obvious to the artisan of ordinary skill to provide an unablated zone in the central region and the specific diopter corrections recited, since these are well within the scope of one having ordinary skill in the art, are not critical, and provide no

Art Unit: 3735

unexpected result, thus producing a device and method such as claimed.

Applicant's arguments filed July 15, 2008 have been fully considered but they are not persuasive. The arguments are not persuasive for the reasons set forth above.

Applicant's arguments with respect to claims 27-40 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to david shay whose telephone number is (571) 272-4773. The examiner can normally be reached on Tuesday through Friday from 6:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Johnson, can be reached on Monday through Friday from 7:00 a.m. to 3:30



Art Unit: 3735

p.m. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/david shay/

Primary Examiner, Art Unit 3735